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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,896

08/18/2006

Tsutomu Kawakatsu

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3856

32294

7590

06/09/2009

SQUIRE, SANDERS & DEMPSEY L.L.P.
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VIENNA, VA 22182-6212

EXAMINER

BINDA, GREGORY JOHN

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

06/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,896	Applicant(s) KAWAKATSU ET AL.	
	Examiner Greg Binda	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 7-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

2. Applicants' election with traverse of the constant velocity joint shown in Figs. 1-5, 9 & 10 (Species I) in the reply filed on May 5, 2009 is acknowledged. The traversal is on the ground(s) that the species are not distinct and that prosecuting all species would pose no serious burden. This is not found persuasive because the species are patentably distinct. There is no single common novel feature shared across the species or the claims. Prosecuting more than a single invention in a single application would place serious burden on the examiner since the time given to the examiner to prosecute the application is only enough for the prosecution of a single patentable invention.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 4 & 7-16 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 5, 2009.

4. This application contains claims 4 & 7-16 drawn to an invention nonelected with traverse in the reply filed on May 5, 2009. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 112

5. Claims 3 & 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 3 recites the limitation, “a gap (X) is set between said annular member and said rolling elements”. It is unclear how this gap X corresponds to the gap X disclosed in the specification, since the disclosed gap X also includes the gap between the flange and the rolling elements. See page 17, line 12.

b. Claim 6 recites the limitation, “ θ_{max} ” which is defined as the maximum angle of tilt. It’s not clear how the angle is *definitely* determined. Instead it seems such an angle is arbitrarily set based on situational circumstances that vary from one user to another. As such there is no way for one skilled in the art to determine the metes and bounds of the claim.

Claim Rejections - 35 USC § 102

2. Claims 1-3 & 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Mazziotti, US 3,008,311. Mazziotti shows a constant-velocity joint having a tubular outer member 20 having a plurality of axially extending guide grooves 60 defined in an inner circumferential surface thereof and spaced at predetermined intervals, said outer member being connected to one transmission shaft 12, and an inner member 38 inserted in an open internal space of said outer member and connected to another transmission shaft 10, wherein

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said inner member comprises:

a plurality of trunnions 42 projecting into said guide grooves;

a ring-shaped roller 52 held in contact with each of said guide grooves and fitted over each of said trunnions; and

a plurality of rolling elements 56 rollingly interposed between each of said trunnions and said roller;

said roller having a flange 54 disposed on an inner circumferential surface thereof near a projecting end of each of said trunnions, said flange projecting radially inwardly and circularly extending along said inner circumferential surface;

wherein an annular member (see “annulus” col. 2, line 44) with a beveled surface 48 is mounted on said trunnion near a proximal end 44 thereof;
said rolling elements being retained between said flange and said annular member such that a gap is set between the annular member and the rolling elements.

Allowable Subject Matter

6. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed May 5, 2009 have been fully considered but they are not persuasive.

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- a. In regard to the rejection at item 5a above, applicants argue that the gap X recited in claim 3 is not the gap X disclosed in the specification, but is instead the gap K which equates to a portion of the disclosed gap X. If that is the case, then why doesn't the claim recite gap K?
- b. In regard to the rejection at item 5b above, applicants argue the maximum tilt angle θ_{\max} of the shaft 33 is not ambiguous because it is a desired angle. It is not clear who or what determines (i.e. desires) the value of this angle. Nor it is clear how the functional relationship in recited in the claim would be satisfied if the desired angle were 0 degrees.
- c. In regard to the rejection at item 6 above, applicants argue that the annular member 48 of Mazziotti is not mounted on the trunnion 42 near a proximal end because it rests on the surface 44. However, Figs. 1 & 2 show the surface 44 is the proximal end of the trunnion 42.
- d. In regard to the rejection at item 6 above, applicants argue that since the annular member 48 is engaged with the roller 52, it is not mounted on the trunnion 42. However, Figs. 1 & 2 show the annular member is mounted on the trunnion 42 while it is engaged with the roller 52.
- e. In regard to the rejection at item 6 above, applicants argue that the rolling elements 56 are not retained between the flange 54 and the annular element 48 because they are bound by the surface 46. However, Figs. 1 & 2 show the surface 46, like the rolling elements 56, is between the flange 54 and the annular element 48. The drawings

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do not show the rolling elements 56 retained outside the area between the flange 54 and the annular element 48.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (571) 272-7077. The examiner can normally be reached on M-F 10:30 am to 8:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Greg Binda/
Primary Examiner, Art Unit 3679